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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,391	03/12/2004	Claude Decroix	MEISS81.001AUS	7187
20995	7590	07/06/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			SZUMNY, JONATHON A	
			ART UNIT	PAPER NUMBER
			3632	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/800,391	Applicant(s) DECROIX, CLAUDE	
	Examiner Jon A. Szumny	Art Unit 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



This is the second office action for application number 10/800,391,
Connection Assembly for a Grid Structure, filed on March 12, 2004.

The text of those sections of Title 35, U.S. Code not included in this action
can be found in a prior Office action.

Claim Objections

Claims 6 and 9 are objected to because of the following informalities:

In claim 6, line 3, "he" should be --the--;

In claim 9, line 2, "an" should be --and--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 4, 5, 8, 11 and 14 are rejected under 35 U.S.C. 112, second paragraph,
as being indefinite for failing to particularly point out and distinctly claim the
subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the drilled aperture" in line 3. There is
insufficient antecedent basis for this limitation in the claim.

It is not understood if "a connection position (P1)" of claim 8 is the same as the "a position (P1)" of claim 6 or different therefrom. For the purposes of this office action, the Examiner will assume "a connection position (P1)" and "a position (P1)" are the same position.

Regarding claim 11, it is noted that the first element was already recited in claim 1 as comprising a "tube", so it is redundant and hence double inclusion to further define the first element as being "tubular".

Claim 14 recites the limitation "The grid structure" in line 1. There is insufficient antecedent basis for this limitation in the claim. Further, in lines 1-2, it is not understood what is meant by "a plurality of first elongates," "tubular elements," and "a plurality of second elongate members." It appears the applicant meant to recite "a plurality of first elongate tubular elements" along with "a plurality of second elongate elements," and the Examiner will assume this is so for the purposes of this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent number 6,688,803 to Maria Van Giezen et al. in view of U.S. Patent number 4,321,068 to Cottrell et al.

With respect to claims 1-3 and 6-14, Maria Van Giezen et al. '803 discloses a connection assembly (figures 4,5,10) comprising a plurality of first (1) and second (2) elongate elements forming a grid structure connected to one another at an intersection, the first element (1) comprising a tube and defining at least one receiving opening/aperture (3) through which the second element is passed, wherein the first element defines two aligned receiving openings (3, both sides) through which the second element is passed; wherein the inner surface of the first element is provided with at least one ridge (5) the apex of which lies close to or contacts the outer surface of the second element at a position, wherein the first and second elements are connected to one another at one or more positions in the region of their intersection (see figure 5), wherein a connection position is formed where the outer surface of the second element lies opposed to the inner surface of the first element at the apex of the ridge, wherein the first and second

elements are made of metal and are connected to one another at the positions via welding (column 4, lines 31-33), wherein the first and second elements are alternately made of a plastics material and are connected at the one or more positions by melt bonding (column 4, lines 33-34, "fusion bonding"), wherein the first and second elements are tubular with substantially circular cross sections, wherein the diameter of the second element is smaller by between 20% to 30% than the diameter of the first element (column 3, lines 24-26), wherein the first elements are arranged in a spaced and parallel relationship with each other, wherein the second elements are arranged in a spaced and parallel relationship with each other, wherein the first and second elements intersect and are connected to one another via the previously described connection assembly.

However, Maria Van Giezen et al. '803 fails to specifically teach the portions of the first element defining the peripheries of both of the receiving openings protruding inwards into the tube to define two collars surrounding the second element; wherein an inner dimension of each collar is dimensioned with respect to an outer dimension of the second element so as to provide a frictional fit of the two elements.

Nevertheless, Cottrell et al. '068 discloses a connection assembly (figures 1,2) comprising first and second elongate elements (11,12) connected to one another at an intersection, the first element comprising a tube and defining at least one receiving opening (15) through which the second element is passed, and characterized in that the portion of the first element defining the periphery of the receiving opening protrudes inwards into the tube to define a collar (near 15, see figure 2) surrounding the second element; wherein the first element defines two aligned receiving openings (see figure 2) through which the second element is passed, the portions of the first element defining the peripheries of both of the receiving openings protruding inwards into the tube to define two collars surrounding the second element; wherein an inner dimension of each collar is dimensioned with respect to an outer dimension of the second element so as to provide a frictional fit of the two elements (see figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the periphery of each receiving opening of Maria Van Giezen et al. '803 to protrude inwards into the tube to define a collar surrounding the second element so as to provide a frictional fit of the two

elements in order to increase the area around the openings engaged by the second element hence providing for a more structurally sound grid structure.

Further, regarding claims 4 and 5, the diameter of the aperture is inherently less than the diameter of the second element (see column 1, line 66 through column 2, line 2 of Cottrell et al. '068, when the second element 12 is inserted into the receiving opening, it takes advantage of the natural spring formed by the material, hence, before the second element 12 is inserted into the receiving opening, the diameter of the receiving opening must be less than that of the second element 12), wherein the diameter of the aperture is equal to that of the opening, wherein the openings/apertures could inherently be drilled or punched (it is noted that the "drilling," "punching," and "folding" of claims 4 and 5 are merely functional recitations since independent claim 1 is structural claim and thus all claimed dependent thereon are also considered structural claims).

Response to Arguments

Applicant's arguments filed May 16, 2005 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon A Szumny whose telephone number is (571) 272-6824. The examiner can normally be reached on Monday-Friday 8-4.

The fax phone number for the organization where this application and proceeding are assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3600.

A handwritten signature in black ink, appearing to be 'Jon Szumny', with a long horizontal line extending to the right.

Jon Szumny
Primary Examiner
Technology Center 3600
Art Unit 3632
June 28, 2005